PATENT APPLICATION
Docket No. 9739-070

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor:	Craig Stolarczyk, et al	Conf. No.	3341
Serial No.	10/598,379	Examiner:	Amajad A. Abraham
Filed:	August 25, 2006	Art Unit:	1794
For:	RESTORING DAMAGED RAIL SEATS LOCATED ON CONCRETE RAIL TIES		

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION TRAVERSING CITED REFERENCES (37 C.F.R. 1.132)

The undersigned party hereby declares, as follows:

1. The person making this Declaration is Robert M. Loomis ("Loomis"), Technical Manager for the Willamette Valley Company of Eugene, Oregon ("WVC"), a position he has held for 14 years.

2. Loomis is a co-inventor in the above U.S. Patent Application No.10/598,379.

3. WVC is the assignee of the Application.

4. Loomis' higher education background includes a B.S. in Chemistry from the University of Oregon and an M.S. in Chemistry from the University of New Mexico.

5. In the opinion of the undersigned, the method disclosed in US Patent No.

7,138,437 to GIORGINI, et al ("GIORGINI") and/or U.S. 4,295,259 to RHODES, et al ("RHODES") is totally distinguishable from the method of claims 1-21 in the above referenced patent application for the reasons set forth below in paragraphs 6-14.

6. GIORGINI and RHODES relate to the repairing "spike holes" in "wooden" rail tie assemblies using a polyurethane "foam" material. Our method relates to a completely different technology having totally different problems. More specifically, the subject method is directed to applying a polymeric material comprising a poly(urethane-urea) material to a damaged rail seat located on the concrete rail tie for restoring the damaged rail seat.

7. GIORGINI and RHODES relate to the repair of spike holes wooden rail ties. Spike holes are nonexistent in our concrete rail ties.

8. Rail seat abrasion is a major problem with respect to concrete rail ties. It is a major safety and maintenance problem for railroad companies who employ concrete rail ties. Rail seat abrasion is not a major problem with respect to wooden rail ties. Wooden rail ties can be readily resurfaced to rectify any comparable wear problem. Concrete rail ties, on the other hand, cannot be resurfaced to correct abrasion of the rail seat. Instead, the rail seat on a concrete rail ties must be restored. Our method is the only one in the industry which successfully commercially overcomes the rail seat abrasion problem without the problems associated with the use of epoxies. Our polymeric material represents a significant improvement over epoxies. For example, our polymeric material cures more quickly, does not require the use of rail holding plates, is extremely tough and is not brittle. A further discussion of the problems which result from the use of epoxies for repairing rail seat abrasion can be found in the above-reference patent application from page 2, line 18 to page 3, line 6.

9. GIORGINI cannot provide a sag resistant polymeric repaired article because it wasn't designed for use with a concrete rail tie to overcome rail seat abrasion. and cannot be produced by introducing a polyurethane foam material per se into a rail

seat abrasion location of a concrete rail tie. GIORGINI requires the addition of a substantial amount of strength enhancers to the polyurethane foam to give a repaired spike hole of a wooden rail tie, not a rail seat abrasion of a concrete rail tie, enough strength to prevent deformation during a train pass. In a totally different environment to GIORGINI. We apply a polymeric material comprising a non-foam poly(urethane-urea) material. A foamed polyurethane will not work to solve the problem of abrasion of rail seat on a concrete rail tie. No strength enhancers are added to the claimed poly(urethane-urea) material in order for it to be substantially sag resistant and maintain its shape without substantial runoff from the concrete rail tie during said restoring of the damage rail seat. Thus, by employing a poly(urethane-urea) material which is not a foam, and in the absence of strength enhancers, both of which are necessary according to GIORGINI in polyurethane foams in wooden rail tie spike hole restoration, the concrete rail ties are restored, and the rail seat maintains the gauge of a rail assembly under dynamic operating conditions.

10. GIORGINI and RHODES each employ polyurethane foam compositions. The polymeric material claimed in the above-described patent application is a solid (non-foam), high-density, poly(urethane-urea) material. The use of a foam material is totally unacceptable and unsuitable for the repair of concrete ties. In fact, that is why it is not used for this purpose. Instead, both GIORGINI and RHODES employ the foam material to fill a spike hole in a wooden rail tie, a entirely different end use. Polymeric foams have many major disadvantages which are not present in non-foam polymeric materials. These disadvantages are expressly spelled out in accompanying Amendment. GIORGINI and RHODES do not expressly teach restoring a damaged rail seat on a concrete rail tie by curing a poly(urethane-urea) polymeric material, which is a non-foam polymer, under ambient temperature and pressure conditions.

11. Our poly(urethane-urea) material has high compression resistance which is critical in maintaining the rail gauge of the rail assembly. For example, the restored rail seat can have a modulus which is increased to a level which will resist compressive loading and maintain the rail gauge of the rail assembly. Conversely, a polyurethane

foam cannot work in a rail seat abrasion restoration application on a concrete rail tie because (a) it is easily compressed (high level of crushability), (b) lacks durability, (c) it rises unevenly (leading to an uneven surface) and (d) it fails to maintain a level rail seat and stable rail gauge.

12. RHODES requires, before the polyurethane has cured, the placing of rail-holding plates on the ties over the filled spike holes. The subject polymeric material, on the other hand, is self-supporting and is substantially sag resistant and maintaining it's shape without substantial runoff from the concrete rail tie during said restoring of the damage rail seat. Rail-holding plates are not present in the method of claims 1-21 because we do not require auxiliary mechanical support to effectively and efficiently provide a polymeric material which is sag resistant and maintaining it's shape without substantial runoff from the concrete rail tie during said restoring of the damage rail seat.

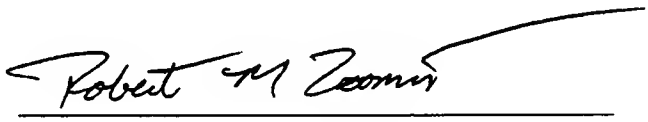
13. GIORGINI and RHODES do not expressly teach: (1) rail ties having a restored rail seat maintains the gauge of a rail assembly under dynamic operating conditions; (2) a modulus of the restored rail seat which is increased to a level which will resist compressive loading and maintain the rail gauge of the rail assembly; (3) an Elongation of the restored rail seat which is at least about 10%; and (4) a Shore D (24 hour) Hardness of the restored rail seat which is at least about 65. It is not possible to achieve properties (1)-(4) above with a polyurethane foam because the foam cell structure will collapse or severely deform under the specified restoration conditions.

14. Giorgini in view of Rhodes does not provide the same process and/or the same materials as claims 1-21. It is clear that the process of Giorgini and Rhodes would not produce a restored rail seat having the properties set forth in claims 1-21.

I hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title

18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Dated this 11 day of June, 2009.



Robert M. Loomis